



## COMPOSTING MAKES \$ENSE

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As battles rage over new landfills, recycling becomes more and more important. Composting is one of the most effective recycling strategies. With a minimum of effort, homeowners can reduce their garbage volume, protect the environment and save money.

Many items we normally throw away can be turned into nutrient-rich compost. Yard waste, vegetable scraps, coffee grounds, old newspapers, and many other items can become the foundation for a beautiful lawn or garden rather than being hauled to a landfill. By following a few simple directions, growers can enhance their soil's nutrient content, improve its physical properties, and increase its water-holding capacity.

How do you manage this garbage conversion? One simple method is to prepare a compost heap in which you alternate layers of organic matter with layers of soil. The organic layer should be 6 to 12 inches deep, and the soil layer 1 to 2 inches deep. Because soil microorganisms require nitrogen to decompose organic material, growers should generally mix 3 to 5 pounds of 10-10-10 fertilizer (or the equivalent) per 100 pounds of organic material.

Not all organic materials are appropriate for a compost heap. Avoid pet wastes, which can transmit diseases. Also avoid meat, bones and dairy products, which can attract rodents.

Once you have completed the initial layers, wet the heap to begin the decomposition process. Apply enough water to moisten the material, but do not make it soggy. Turn the pile over every three to four weeks to ensure uniform decomposition.

As bacteria break down the materials, the pile will give off a great deal of heat. A carefully managed pile will generally take about four months to decompose thoroughly—although the precise time will vary depending on climate and materials. In general, when the mixed material no longer generates heat, your compost is ready to apply. The compost can be used as a mulch or soil additive to supply organic matter and nutrients to gardens and lawns.

The challenge at this stage is estimating nutrient content, which can vary depending on source materials. Growers must carefully determine application rates to find out if the compost will supply plants with adequate nitrogen, phosphorous, and potassium. They must also find out if the compost has high concentrations of soluble salts, which can stunt plant roots.

The most accurate and efficient way to make these determinations is to submit a waste sample to the NCDA&CS Agronomic Division. The division's Plant/Waste/Solution section will determine the concentration of 12 essential plant nutrients in the compost and provide recommendations for the usage specified.

In addition to submitting a compost sample, growers should also submit soil samples from the areas over which they intend to spread the waste. A staff agronomist can then compare soil nutrient status to compost nutrient availability and make a recommendation tailored to the specific materials and needs.

There is a \$4 charge for each waste analysis; there is no charge for a soil test. For more information on composting, growers should request Horticulture Information Leaflet No. 8100 from their county Cooperative Extension office.